

Plain language about the new Proposed Plan

May 2019

CTEC's mission is to help people in the Butte area to understand and respond to complex technical information related to the area's environmental issues. Here we answer some common questions about EPA's Proposed Plan for finalizing the Butte Priority Soils cleanup.

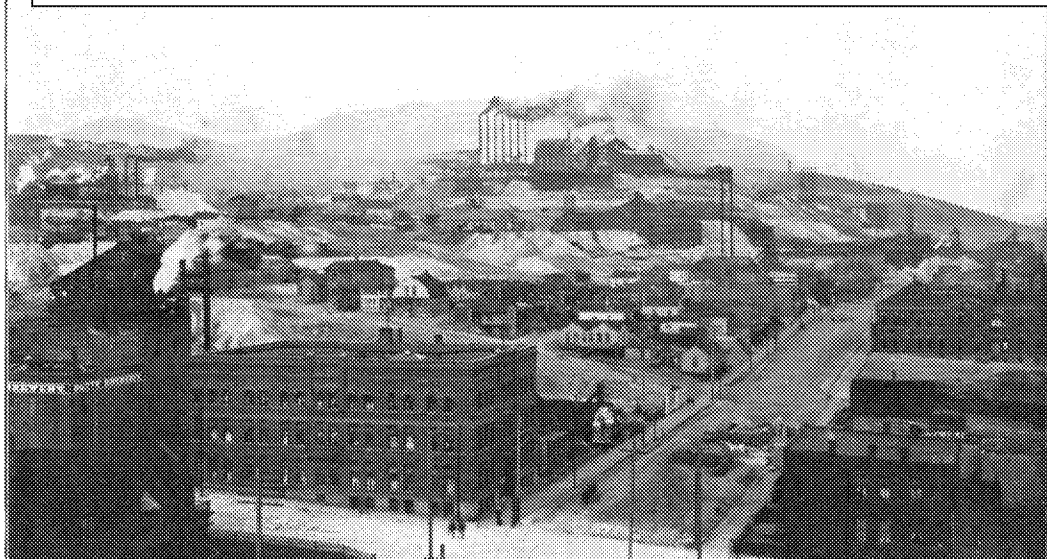
Why do we need stormwater basins?

By capturing and retaining water, stormwater basins allow metals which are stuck to the muddiness of stormwater to settle in the basin and stay out of the creek. The basins will treat contaminated runoff and the cleaner water can be slowly released to the creek in a controlled way which will not exceed water quality standards and endanger life in the creek.

Will all mining waste be removed?

No, the proposed plan would remove much of the accessible mining waste. Unfortunately, it is unrealistic to remove all mining waste in Butte. The city is literally built upon mine waste (see photo) and removing it all would require removing much of the town. Inaccessible waste will remain under roads, railroads, utilities, houses, and other infrastructure. That waste is or will be capped so that it is not a danger to humans and not a threat to Silver Bow Creek.

The Butte Hill in 1900. Mine waste underlies much of the infrastructure such as roads and buildings in Butte (public domain photo courtesy Butte Digital Image Project at Montana Memory Project).



The proposed plan will remove much of the large mining waste sources the Diggings East (south of George St.) and Northside tailings (south of Casey St.), the Butte Reduction Works (west of Montana St.), and along Blacktail Creek. Some accessible waste will remain at depth in the Diggings East and Northside area and on the north side of the restored Silver Bow Creek at the Butte Reduction Works. The extent of waste removal is part of a compromise reached with BP-ARCO. Water which percolates through remaining waste will be captured in an expanded groundwater capture system.

What does it mean they are waiving water quality standards?

The proposed plan would waive certain water quality standards for Silver Bow Creek. It would be easy to think this means the creek will never meet standards and will always be devoid of fish and native aquatic life; but this isn't the case. The change would replace the current state-based water quality standard for copper, zinc, and potentially other metals with federal standards. The federal standards are also safe for aquatic life; they are based on requirements of the Clean Water Act which is the paramount water quality law in the U.S. The difference comes down to the state standard being more conservative because it includes metals in particle form in the water. In exchange for waiving state

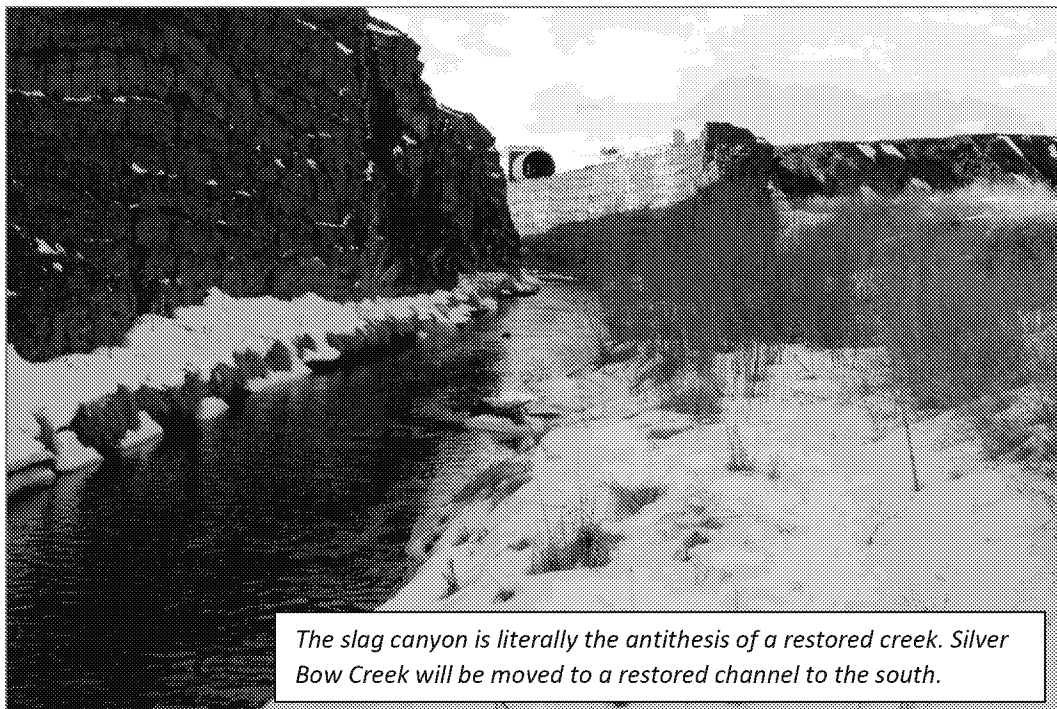
standards, BP-ARCO will remove much of the Diggings East and Northside mining waste and construct stormwater basins to capture the metals that are in particle form.

Will the storm basins be safe?

Yes, the possibility that children and pets will contact, drink the water or eat the dirt, in the basins was evaluated. The storm basins will not be a swimming or fishing area; a separate fishing pond is proposed outside of the storm treatment ponds. The possibility that a child could wade into a basin and accidentally drink a small quantity (1/4 of a fluid ounce) of the water was considered and the possible effects on health were minimal. It will be important to keep children and pets from playing in the basins.

Will the creek be restored?

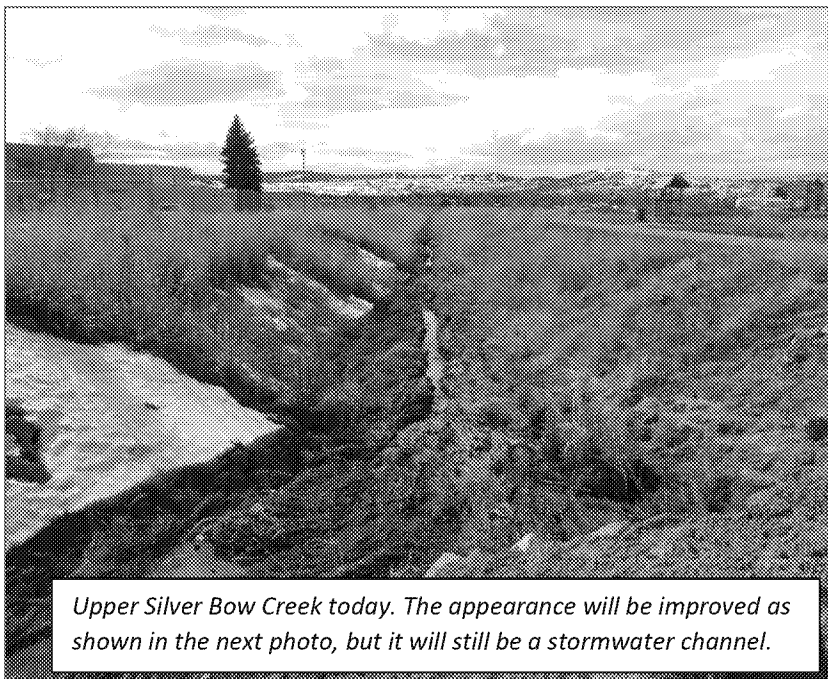
The creek will be restored below Montana St. at the Butte Reduction Works area. Silver Bow Creek currently flows through the "Slag Canyon" where it is boxed in by walls made of smelter slag blocks and the creek picks up contamination. The creek will be removed from the Slag Canyon and reconstructed on a clean floodplain with a restored streamside riparian area, near where the railroad tracks are.



The slag canyon is literally the antithesis of a restored creek. Silver Bow Creek will be moved to a restored channel to the south.

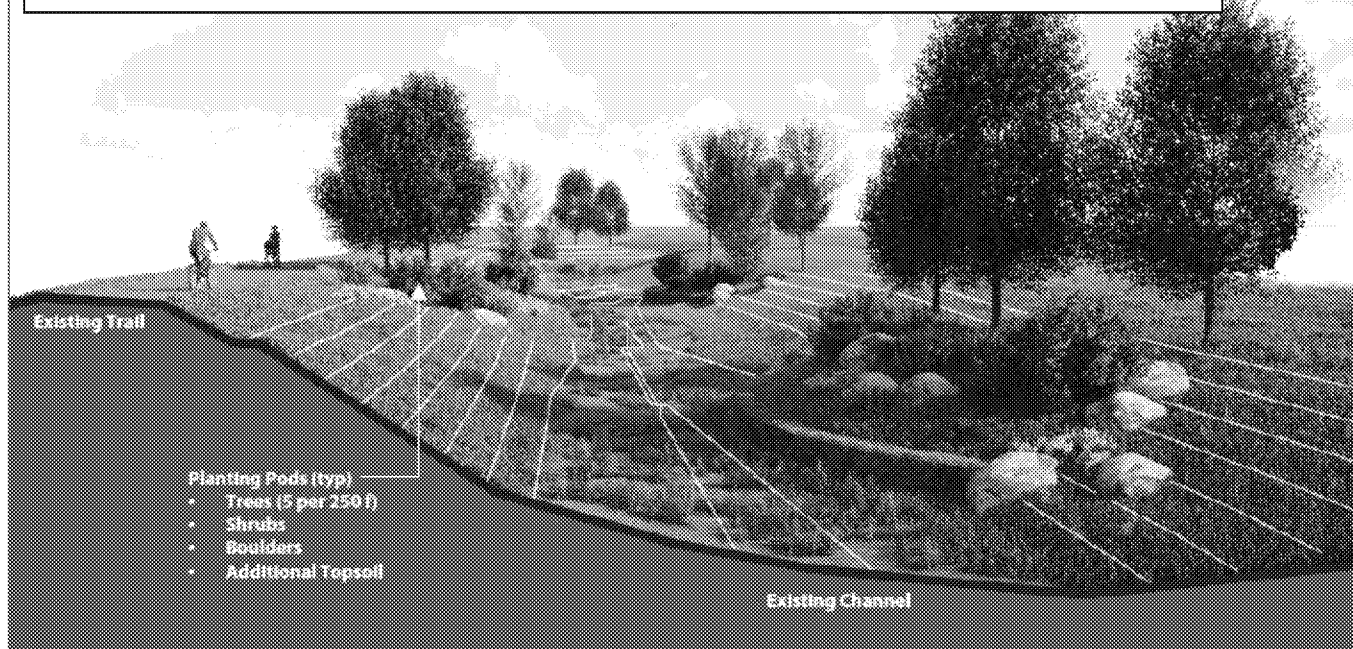
Blacktail Creek will also see significant restoration from near Lexington Ave to where it meets Silver Bow Creek near the visitor center. Mine waste will be removed from Blacktail Creek and floodplain and the creek will be restored at the same location.

Upper Silver Bow Creek where it follows George St. up towards the Civic Center will not be restored. Restoration of this section of the creek has been the focus of Restore our Creek Coalition. The current Upper Silver Bow Creek channel will continue to be part of the storm drainage but will be made more appealing with additional trees and more natural features. EPA does not have legal authority to force a restored creek to be built here. BP-ARCO and the State have worked out a plan to donate an undisclosed amount of money towards future efforts to see Restore our Creek's vision of a meandering and flowing creek come to reality.



Upper Silver Bow Creek today. The appearance will be improved as shown in the next photo, but it will still be a stormwater channel.

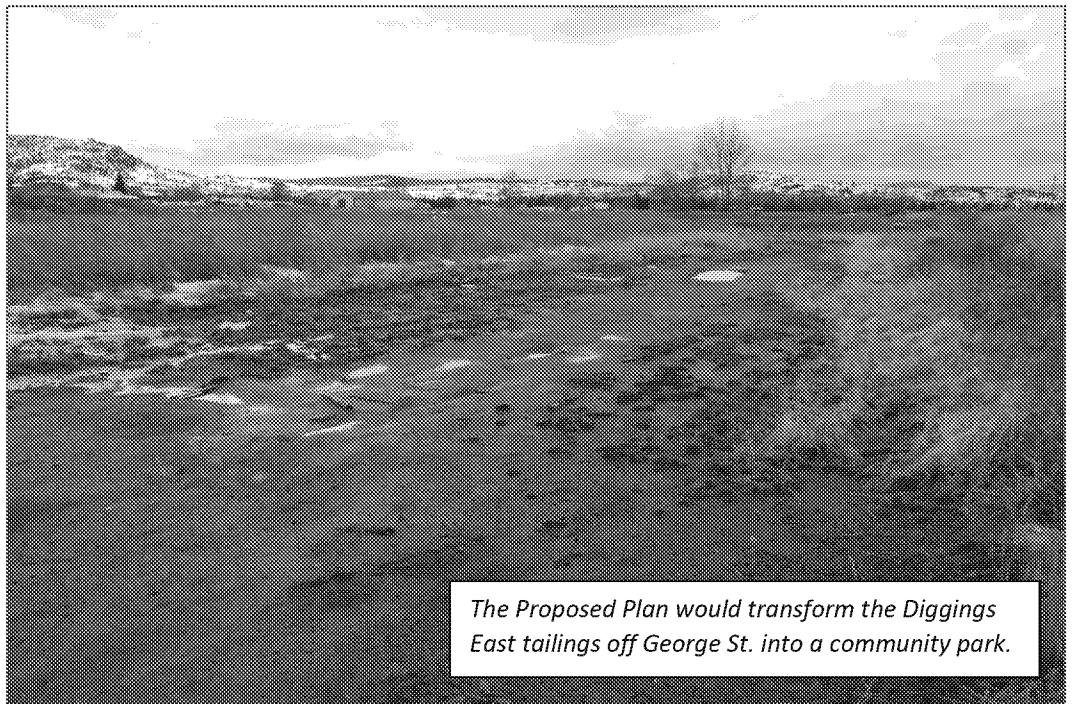
The Proposed Plan would improve, but not restore Upper Silver Bow Creek (rendering by Land Design, Inc. for ARCO)



How does this Proposed Plan compare to the one from 2004?

The original Proposed Plan from 2004 missed a lot of community and state concerns. Some of the major deficiencies in the 2004 Proposed Plan include it failed to recognize or fix the danger to Silver Bow Creek and Blacktail Creek associated with buried mining waste at the Parrott, Diggings East, and Northside Tailings; it did not address concerns that contaminated groundwater was escaping treatment and impacting the creek; and the Residential Metals Abatement Program (RMAP) was limited to the Superfund boundary and would not remove contaminants at all homes where it is needed. These concerns are much better addressed in the new Proposed Plan which calls for extensive tailings removal, additional groundwater capture, and expansion of the RMAP area to the county border.

The new Proposed Plan builds upon an additional 14 years of experience and study. The Proposed Plan identifies and proposes to remedy serious issues that were not even on the radar in 2004 such as the mining waste in the Butte Reduction Work, Slag Canyon, and underneath Blacktail Creek. The new Proposed Plan mandates continuing the health studies and Medical Monitoring Working Group including members from the public. The new plan also includes significant parks, trails, a fishing pond, and land reclamation and stream restoration that was not even contemplated in 2004.



The Proposed Plan would transform the Diggings East tailings off George St. into a community park.